

wherein the apparent molecular weight is about 105-115 kDa, as determined by sodium dodecylsulfate-polyacrylamide gel electrophoresis, wherein the *Chlamydia* species is *Chlamydia trachomatis*, *Chlamydia pecorum*, or *Chlamydia pneumoniae* together with a pharmaceutical carrier suitable for in vivo administration.

45. The method of claim 44, in which the composition is formulated as a microparticle, a capsule, a liposome preparation or an emulsion.

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Cont.  
46. The method of claim 44, in which the composition further comprises an adjuvant.

47. The method of claim 21 wherein the HMW protein comprises an amino acid sequence of SEQ. ID No. 2, 15 or 16.

#### REMARKS

The specification is amended to be consistent with the corrected filing receipt and to recite all priorities claimed by the Declaration originally filed with this application.

Restriction to one of the following is required:

Group I.      Claims 1-6, 16-17, 19-20, 25, 30-31 and 38-39 directed to a HMW protein and compositions containing said protein;

Group II.     Claims 7-15, 18-19, 20, 25, 20-21 and 41 directed to nucleic acids, vectors, host cells methods of culture and a kit;

Group III.    Claims 21-22 and 32-37 directed to methods of treatment using a protein;

Group IV.     Claims 21-22 and 32-37 directed to methods of treatment using a nucleic acid;

Group V.      Claims 23-25 and 30-31 directed to antibodies and compositions containing an antibody;

Group VI. Claims 32-37 directed to methods of treatment using an antibody;

Group VII. Claims 26-27 directed to a method for detecting antibodies and a kit;

Group VIII. Claims 28-29 directed to methods for detecting *Chlamydia* and a kit;  
and

Group IX. Claims 40-41 directed to hybridization methods and a kit.

In response, attorneys for Applicants hereby elect, with traverse, to prosecute the subject matter of Group II including claims 21-22 and 32-37 directed to methods of treatment using a protein.

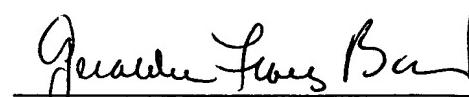
By amendment herein, non-elected claims 1-20, 23-31 and 38-41 are cancelled without prejudice. Applicants fully reserve all rights to prosecute the non-elected subject matter in a subsequent application.

Claims 21, 32 and 35-37 are amended to avoid dependency on cancelled claims. Claim 33 is amended to avoid redundancy. New claims 42-47 directed to elected subject matter are added. No new matter is added. The amended claims and new claims 42-47 are fully supported by the specification and claims as originally filed. None of the amendments to the claims is a limiting amendment as they merely are intended to make the pending claims independent of cancelled non-elected claims and consistent with the elected invention.

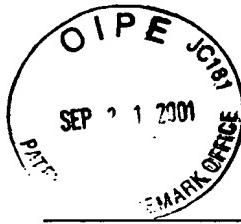
Examiner's attention is directed to an Information Disclosure Statement with revised PTO 1449 Form listing references AA-AD submitted with this application as filed (a copy of the previously filed PTO 1449 Form listing references AA-AD is enclosed for your convenience) and a Supplemental Information Disclosure Statement with revised PTO 1449 Form listing references AE-AR submitted herewith. A copy of each of the references AA-AD can be found in the file of this application; a copy of references AE-AR can be found in the grand-parent application Serial No. 08/942,596 filed October 2, 1997, priority benefits of which are claimed under § 120. A copy of References AS-AV is submitted with the Information Disclosure Statement. It is requested that all references cited be made of record in the file of this application.

Respectfully submitted,

Date: September 21, 2001

  
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APPENDIX A

**MARKED UP VERSION OF AMENDED CLAIMS**

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21. (Once Amended) A method of producing an immune response in an animal comprising administering to said animal an effective amount of [the] an antigenic composition comprising an isolated Chlamydia species high molecular weight (HMW) protein wherein the apparent molecular weight is about 105-115 kDa, as determined by sodium dodecylsulfate-polyacrylamide gel electrophoresis (SDS-PAGE), wherein the Chlamydia species is Chlamydia trachomatis, Chlamydia pecorum, or Chlamydia pneumoniae, or an analogue of the HMW protein wherein the analogue has an apparent molecular weight of about 105-115 kDa, as determined by SDS-PAGE and is recognizable by an antibody that specifically binds to a peptide comprising an amino acid sequence of SEQ ID No. 2, 15 or 16 [of claim 20 or the immunogenic composition of claim 19].

32. (Once Amended) A method of preventing, treating or ameliorating a disorder related to *Chlamydia* in a host in need thereof comprising administering to a host, an effective amount of a [the] pharmaceutical composition or vaccine composition comprising an isolated Chlamydia species high molecular weight (HMW) protein wherein the apparent molecular weight is about 105-115 kDa, as determined by sodium dodecylsulfate-polyacrylamide gel electrophoresis (SDS-PAGE), wherein the Chlamydia species is Chlamydia trachomatis, Chlamydia pecorum, or Chlamydia pneumoniae, or an analogue of the HMW protein wherein the analogue has an apparent molecular weight of about 105-115 kDa, as determined by SDS-PAGE and is recognizable by an antibody that specifically binds to a peptide comprising an amino acid sequence of SEQ ID No. 2, 15 or 16 or a fragment of said HMW wherein the fragment is recognizable by an antibody that specifically binds to a peptide comprising an amino acid sequence of SEQ ID No. 2, 15 or 16 or a recombinant protein comprising a *Chlamydia* protein and a leader sequence, wherein the apparent molecular weight of said protein is about 105-115 kDa as determined by sodium dodecylsulfate-polyacrylamide gel electrophoresis [of claim 30 or the vaccine composition of claim 31].

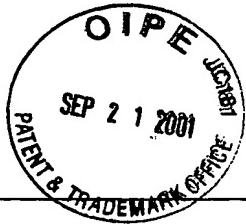
33. (Once Amended) The method of claim 32, wherein the disorder is selected from the group consisting of [a *Chlamydia* bacterial infection,] conjunctivitis,

urethritis, lymphogranuloma venereum (LGV), cervicitis, epididymitis, endometritis, pelvic inflammatory disease (PID), salpingitis, tubal occlusion, infertility, cervical cancer, arteriosclerosis and atherosclerosis.

35. (Once Amended) The [composition] method of [any one of claims 19, 20, 30 or 31] claim 32, in which the composition is formulated for *in vivo* administration to a host to confer protection against disease caused by a species of *Chlamydia*.

36. (Once Amended) The [composition] method of any one of claims [19, 20, 30 or 31] 32, 33 or 35 wherein the disorder is associated with a *Chlamydia* species [is] selected from the group consisting of *Chlamydia trachomatis*, *Chlamydia pecorum*, *Chlamydia psittaci* and *Chlamydia pneumoniae*.

37. (Once Amended) The [composition] method of [any one of claims 19, 20, 30 or 31] claim 32, in which the pharmaceutical composition is formulated as a microparticle, capsule, or liposome preparation.



## **APPENDIX B**

### **MARKED-UP VERSION OF SPECIFICATION**

At page 1, after the title, amend the specification to read:

“This application is a continuation of PCT/US98/20737 filed October 1, 1998 which is a continuation-in-part of U.S. Patent Application No. 08/942,596 filed October 2, 1997.”